NOTES ON NORTH AMERICAN NITIDULIDAE, II: CRYPTARCHA SHUCKARD

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The genus Cryptarcha embraces many species which are found in all parts of the world. The six species occuring in the United States have apparently two origins. Cryptarcha ampla, grandicollis, glabra and strigatula n. sp. are closely related to the numerous Neotropical forms, whereas the smaller concinna and gila n. sp. are more closely related to the Palaearctic imperialis Fabr. and its allies. The apparently two origins are reflected in the two subgenera, which are keyed below.

- 1. Prosternum broad between the coxæ and extending beyond the middle of the mesosternum; anterior margin of the metasternum transverse or broadly rounded anteriorly; species usually longer than 4 mm.
 - Cryptarcha s. str.
- 2. Prosternum more or less narrow between the coxæ and not extending beyond the middle of the mesosternum; anterior margin of the metasternum acutely rounded anteriorly; species usually shorter than 4 mm.
 - Lepiarcha Sharp

Subg. Cryptarcha s. str.

This subgenus comprises at least the Palaearctic *strigata*, the North American *strigatula* n. sp., *ample*, *glabra*, and the Neotropical species.

- 2. Apex of prosternal process rounded ampla Er. Apex of prosternal process truncate glabra Schaef.

3. Apex of prosternal process emarginate strigata Fabr. Apex of prosternal process rounded strigatula n. sp.

Cryptarcha ampla Erichson

Cryptarcha ampla Erichson, 1843, in Germar, Zeitschr. Ent. 4: 356.

The color varies from nigro-piceous to testaceous and the size from 4.5 mm. to 7.8 mm. The upper surface may be almost glabrous.

It has been collected at sap of maple and willow, and extends from Quebec to Florida, west to California and Oregon.

Cryptarcha grandicollis Reitter

Cryptarcha grandicollis Reitter, 1875, Verh. Nat. Ver. Brünn, 13: 118.

This species was described from Venezuela but is recorded from North America by Grouvelle, 1913, Coleopt. Cat., pars 56, p. 179. Dr. R. Jeannel has written that there is no specimen of this species in the Grouvelle collection in Paris; so, until confirmed, its inclusion in the North American list must remain doubtful.

Cryptarcha glabra Schaeffer

Cryptarcha glabra Schaeffer, 1909, Bull. Brooklyn Mus. 1: 375.

This rare species is remarkable for being glabrous above, and in having parallel sides. Since only six specimens are known, their data are given. Huach. Mts., Ariz. VIII. 9 in U. S. N. M. (type): Carr Canyon, Huachuca Mts., Ariz. VII, 7-30 in Cal. Acad. Sci.; 4050 ft., Kits Peak, Rincon, Baboquivari Mts., Ariz. in A.M.N.H.; two from Baboquivari Mts., Ariz., April and August in H. C. Fall collection; San Bernardino Ranch, 3750 ft., Cochise Co., Ariz., August in the writer's collection.

Cryptarcha strigata Fabr.

Cryptarcha strigata Fabr., 1787, Mant. Ins. 1: 51.

This species is here restricted to the Palaearctic fauna. The North American individuals that have previously had

this name are separated below and the differences between the two species are given in the description of *strigatula*.

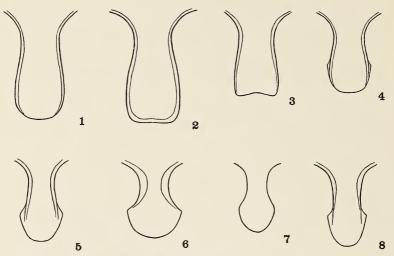


Fig. 1. Ventral views of the prosternal processes in *Cryptarcha*. 1, *C. ampla*; 2, *C. glabra*; 3, *C. strigata*; 4, *C. strigatula* n. sp.; 5, *C. imperialis*; 6, *C. gila* n. sp.; 7, *C. omositoides* (after sketch of B. M. specimen by Dr. H. Scott); 8, *C. concinna*.

Cryptarcha strigatula n. sp.

Cryptarcha strigata auctt. (partim).

Cryptarcha concinna Melsh., Reitter, 1873, nec Melsh., 1853, Syst. Eintheil. Nitid.: p. 150.

As the name implies this species is a diminuitive relative of strigata. It is very similar to strigata, egg-shaped, piceous, alutaeous, sparsely pubescent, with pale setae irregularly arranged on the pronotum but in seven indistinct rows on each elytron. The two transverse sinuous fasciae are much as in strigata, except that the anterior may reach the sutural margin of the elytra. The prosternal process is broadened and emarginate at the tip in strigata, but only slightly broadened and rounded at the tip in strigatula (figs. 3, 4). The length is 2.7-3.2 mm., whereas the length of strigata is from the literature and must be unusual, since the smallest

specimen in the collections of the British Museum and the writer measures 4.0 mm.

Holotype, male, from the Bronx, New York, Aug. 15, 1896, in the writer's collection. Paratypes from Massachusetts, Pennsylvania, New Jersey, Georgia, Illinois in the collections of the Museum of Comparative Zoology, American Museum of Natural History, C. A. Frost, and the writer. Specimens have been seen from as far west as Texas and north to Michigan.

Subg. Lepiarcha Sharp

Lepiarcha Sharp, 1891, Biol. Centr. Amer. Col. II, pt. 1: 385 (type *Cryptarcha omositoides* Reitter).

Cryptarchula Ganglbauer, 1899, Käf. Mitteleur. 3: 551 (type Cryptarcha (Cryptarchula) imperialis Fabr.)

This subgenus contains at least the European *imperialis* and its allies, the Central American *omositoides* Reitter, and the following species.

Prosternal process greatly expanded at tip (fig. 6) *gila* n. sp. Prosternal process only slightly expanded at tip (fig. 8) *concinna* Melsh.

Cryptarcha gila n. sp.

Elongate, piceous above, testaceous beneath. The anterior half of head, lateral fourths of the pronotum, epipleurae, and elytral fasciae testaceous. The upper surface closely punctate, finely pubescent, with numerous pale setae. The setae are arranged in eight rows on each elytron. The under surface obsoletely punctate and more sparsely pubescent. The prosternal process expanded, as shown in fig. 6. Anterior and middle coxae pale testaceous. The mandibles are of equal length and notched at tip. Length 2.5-3.3 mm.

Holotype male, allotype, and paratypes from Wheatfields near Globe, Arizona, May 4, 1934, D. K. Duncan, in the collection of the author. Paratypes with similar data in the collection of H. C. Fall. Also paratypes from Bakersfield, Calif. in the E. C. Van Dyke collection of the California Academy of Sciences.

This species is more elongate and a little longer than *concinna*. The apices of the elytra are more pointed than in

omositoides and concinna, agreeing in this respect with imperialis. The margins of the thorax and the epipleurae are more narrowly reflexed than in concinna and more broadly reflexed than in imperialis.

Cryptarcha concinna Melsheimer

- Cryptarcha concinna Melsheimer, 1853, Cat. of the desc. Col. of U. S., p. 41.
- Cryptarcha liturata Leconte, 1863, List Col. of N. Amer. 1: 30.
- Cryptarcha picta Melsheimer, 1866, Proc. Acad. Sci. Philadelphia 2: 107.
- Cryptarcha bella Reitter, 1873, Syst. Eintheil. Nitid. p. 150. This is an extremely variable species, but is distinctive in its oval outline, explanate pronotal margins, and shape of the prosternal process as shown in fig. 8. The range of concinna is from Massachusetts to Florida, west to southern California and Oregon.